



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,315	04/09/2001	Hiroshi Inoue	10873.688US01	7111

7590 09/16/2003

Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903

[REDACTED] EXAMINER

[REDACTED] WINTER, GENTLE E

[REDACTED] ART UNIT

[REDACTED] PAPER NUMBER

1746

DATE MAILED: 09/16/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/829,315	INOUE ET AL.	
	Examiner	Art Unit	
	Gentle E. Winter	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 01 August 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) 4-15 and 17 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-3 and 16 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Election/Restriction

1. Applicant's election of Group I in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 4,865,932 to Masuda et al (Masuda).
2. Masuda reads on claims 1 as follows, Masuda and claim 1 recite a battery electrode comprising an electrode plate (see e.g. column 8, line 49 *et seq.*) a lead bonded to the electrode plate, wherein the entire surface of the lead opposed to the electrode plate is bonded ultrasonically to the electrode plate. See e.g. column 8, line 49 *et seq.*
3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Japanese publication number 63040254 ('254).
4. The '254 reference reads on claim 1 as follows; both recite an electrode plate (referred to as a "substrate" in '254) a lead (tab) is bonded to the electrode plate, wherein the entire surface

of the lead opposed to the electrode plate is bonded ultrasonically to the electrode plate (ultrasonic vibration horizontal to the electrode substrate). The 254 reference does not appear to disclose an edge portion, thus the reference, based on the abstract, apparently does not support an anticipation rejection.

5. Claims 1-3 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese publication number 63040252 ('252).

6. The '252 reference reads on the claims as follows, '252 and claim 1 recite a battery electrode comprising an electrode plate (electrode) a lead (tab) is bonded to the electrode plate, wherein the entire surface (cover the current correcting tab) of the lead opposed to the electrode plate is bonded ultrasonically (horizontal ultrasonic vibration is applied to the tab to weld to the sinter) to the electrode plate. The lead is disclosed to be bonded to an edge portion (is formed over the whole area and the edge of the tab is completely welded).

7. Claims 1-3 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese publication number 03201367 ('367).

8. The ''367 reference reads on the claims as follows, '367 and claim 1 recite a battery electrode comprising an electrode plate (electrode) a lead (3) is bonded to the electrode plate (2), wherein the entire surface (figure 2) of the lead opposed to the electrode plate is bonded ultrasonically (horizontal ultrasonic vibration is applied to the tab to weld to the sinter, see arrow above element 4) to the electrode plate. The lead is disclosed to be bonded to an edge portion (element 2).

9. Claims 1-3 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 4,591,087 to Frasch.

10. Frasch reads on the claims as follows, Frasch and claim 1 recite an electrode plate (10) a lead bonded to the electrode plate (12), wherein the entire surface of the lead opposed to the electrode plate is bonded ultrasonically to the electrode plate (12b). With specific respect to claim 2 and 16 it is noted, for the record, that the meaning ascribed to "three dimensional porous metal body" is understood in the context of the specification. See for instance references in the Background section of the disclosure and the associated drawing, namely figure 6. The three dimensional porous metal body is illustrated in figure 4 as element 10 and 12 and further the relevant associated text. Figure 3 and relevant associated text discloses bonding is at the edge portion. The rocking motion in figure 4 and relevant associated text guarantees that the entire surface is of the electrode plate is patterned by applying pressure.

Conclusion

11. This examiner agrees in substance with the conclusions relating to patentability as set forth in the search report that is part this file. In some cases the cited art appears to less weight to certain elements or rely on inherency. Because the current claims are anticipated by numerous references no further discussion of the Search Report will be made at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gentle E. Winter whose telephone number is (703) 305-3403. The examiner can normally be reached on Monday-Friday 7:00-3:30.

Art Unit: 1746

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (703) 308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. The direct fax number for this examiner is (703) 746-7746.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gentle E. Winter
Examiner
Art Unit 1746

September 9, 2003



RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700